ABSTRACT OF THE DISCLOSURE

The terminal voltages of respective phase coils of a steering shaft driving motor constituted by a three-phase brushless motor are separately detected. When the terminal voltages detected at at least three different conducting terminals u, v, and w are made Vu, Vv, and Vw, respectively, and the values when those detected values Vu, Vv, and Vw are arranged in order from largest to smallest voltage are made V_1, V_2, and V_3, respectively, provided that $V_1 \geq V_2 \geq V_3$, a calculation is performed to determine if $V_1 + V_3$ coincides with $2*V_2$ within a predetermined allowable range, and a failure is determined based on results obtained from such a calculation.